Installing a Split/Splitless Inlet

Agilent 6850 Series II Network GC System

Accessories G2652A (Standard) and G3343B (High-Pressure)

This kit contains:

Description	Quantity
T-20 Torx® screws, M4 x 8 mm	2
Machine screws M4 x 0.7 12 mm	6
Bottom cup insulation	1
Middle cup insulation	1
Top cup insulation	1
Insulation cup	1
Disposable wrist strap	1
Top block insulation	1
Bottom block insulation	1
Split/Splitless capillary inlet system	1
ChemStation CD (G3343B only)	1
6850 GC User Information CD-ROM (G3343B only)	1
Installation sheet (this document)	1

The inlet and flow module are a factory-assembled and leak-tested unit. Do not disassemble it during installation.

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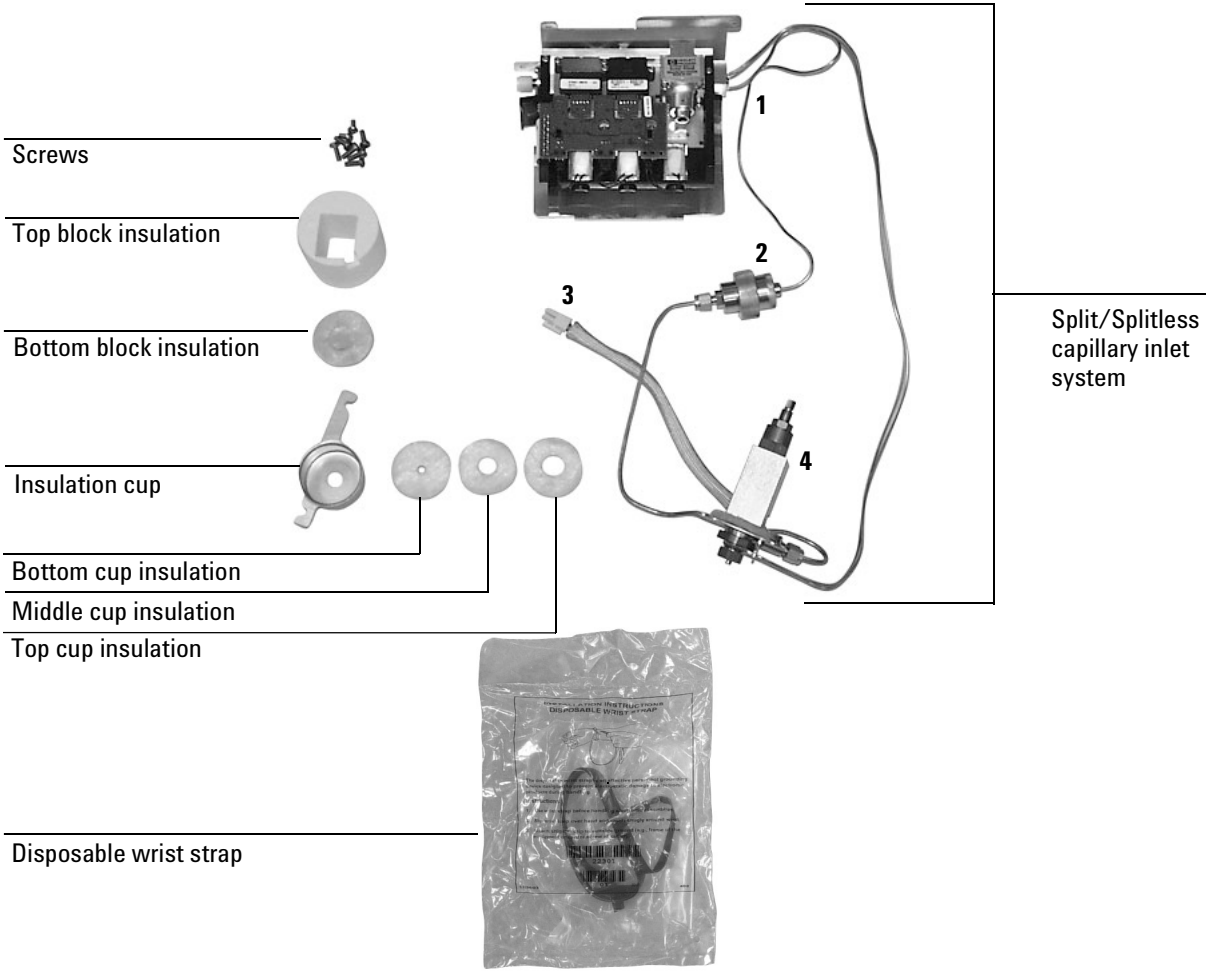


1 - Flow Module
2 - Split vent trap
3 - Heater/Sensor cable
4 - Inlet assembly

Required tools

- Inlet wrench
- T-20 Torx screwdriver

Overview

Caution Before starting, review the safety information listed at the end of this document.

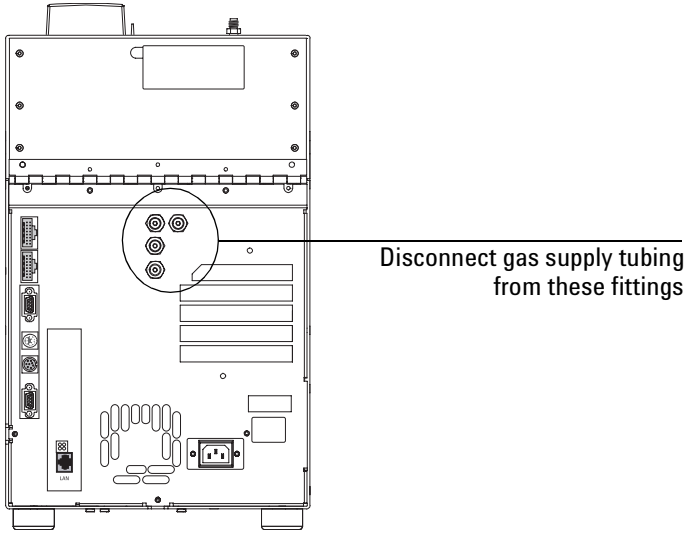
1. Disconnect the GC.
2. Remove the lid top cover.
3. Remove the existing inlet, if necessary.
4. Install the new inlet.
5. Restore the GC to operating condition.

Disconnect the GC

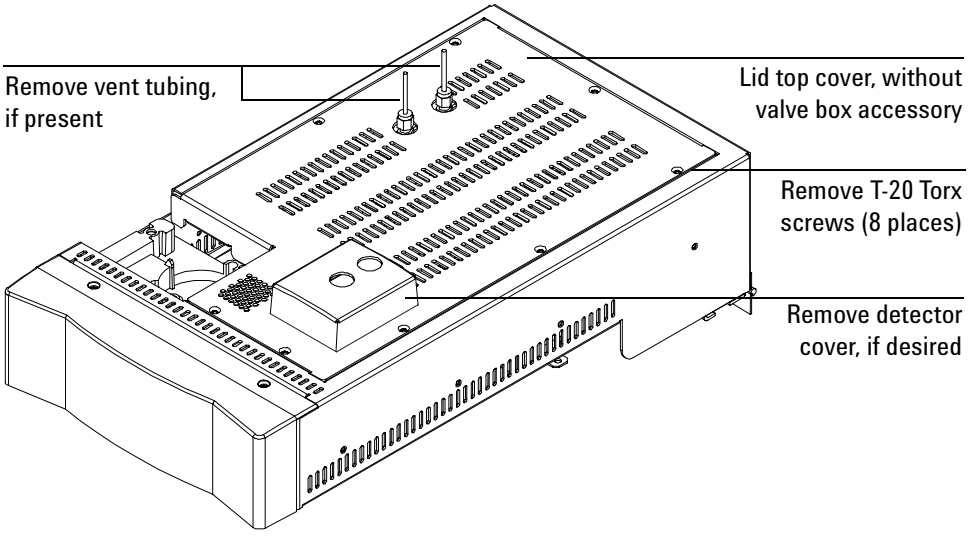
WARNING Hydrogen gas is flammable and potentially explosive. Before replacing the flow module, turn off the hydrogen gas at the source.

WARNING Hazardous voltages are present in the instrument whenever the power cord is connected. Avoid a potentially dangerous shock hazard by disconnecting the power cord before working on the instrument.

1. Turn off the GC and unplug the power cord. Allow time for all heated zones to cool.
2. Open the lid. If a column is installed, disconnect it at the detector end. Remove the nut warmer, insulation, and capillary adapter, if present. Close the lid.
3. Turn all gases off at their sources. Disconnect the carrier and detector gas tubing from the back panel of the instrument.



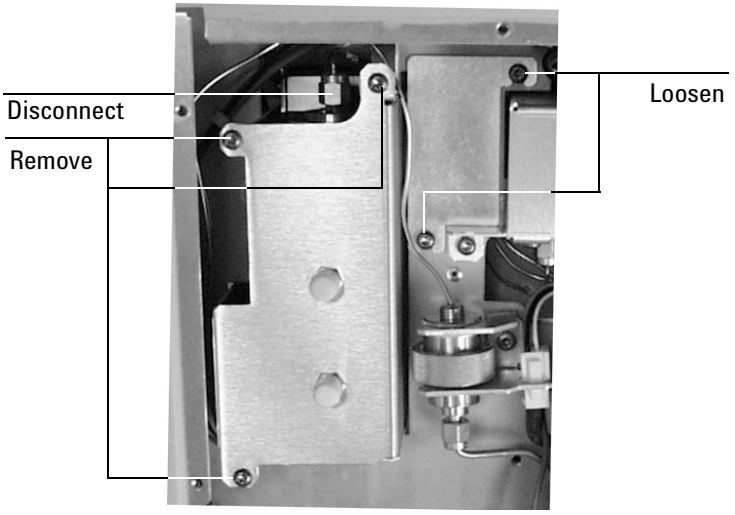
Remove the lid top cover


Remove vent tubing, if present
Lid top cover, without valve box accessory
Remove T-20 Torx screws (8 places)
Remove detector cover, if desired

Remove the existing inlet

If the GC currently has an inlet installed, you must remove it.

1. Loosen the screws holding the connector cover plate next to the inlet flow module.



2. Slide the cover plate off and disconnect the cable from the flow module.
3. Disconnect the gas fitting on the back of the flow module.
4. Remove the three screws on top of the flow module.
5. To continue this procedure, see the following section corresponding to the type of inlet you are removing.

Cool On-Column inlet

1. Use a T-20 Torx screwdriver to loosen the three captive screws that attach the inlet weldment to the top of the inlet carrier.
2. Slide the inlet up and out of the carrier. If necessary, you can also slide the insulation sleeve off of the bottom of the inlet.

Purged Packed inlet

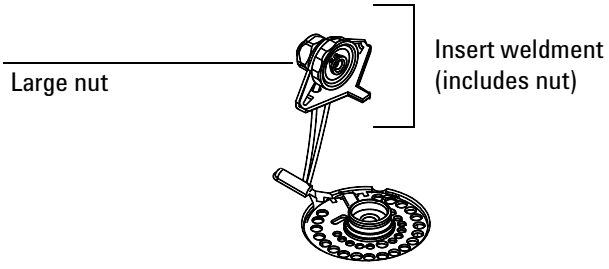
1. Trace the heater/sensor cable from the inlet to the wiring harness connector. Disconnect it.
2. Remove the three screws holding the inlet.
3. Lift the inlet and flow module out of the lid. Remove the insulation in the hole under the inlet.

Programmable Temperature Vaporization inlet

1. Lift the PTV inlet up.
2. Remove the heater connector from the side panel.
3. Disconnect the power cable, thermocouple connector, and cryo connector from the flow module and board. Disconnect the module ribbon cable from the pneumatics board.
4. Slide the flow module out of the chassis, remove the chemical trap assembly from the mounting bracket, and remove the PTV assembly from the GC.

Split/Splitless inlet

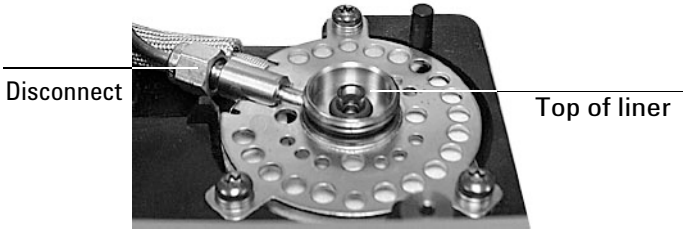
1. Use the inlet wrench to release the large nut on top of the inlet.



2. **If you *do not* have a gas or liquid sample valve**—Remove the insert weldment and the flow module.

   If you *do* have a gas or liquid sample valve—The insert weldment is part of the valve assembly. Move it out of the way. Disconnect the gang block fitting (also part of the valve assembly) from the flow module. Remove the flow module.

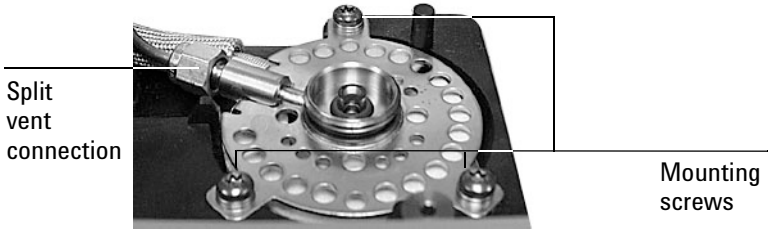
3. Use forceps to remove the liner and O-ring.
4. Disconnect the split vent trap.



5. Trace the heater/sensor cable to the wiring harness connector. Disconnect it.
6. Remove the three screws holding the inlet body.
7. Lift the inlet assembly out of the lid. Remove the insulation in the hole under the inlet.

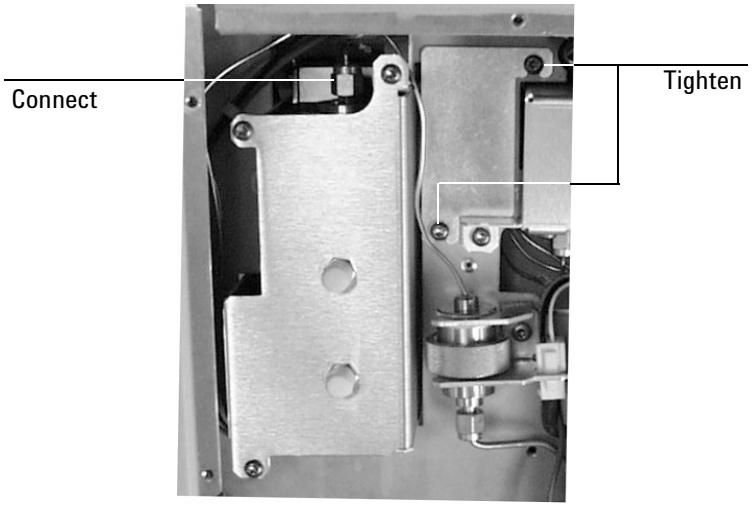
Install the new inlet

1. Remove the center plug from the bottom block insulation. Place the remaining ring in the inlet hole.
2. Place the top block insulation in the hole. Align the long sides of the hole parallel to the sides of the lid.
3. Place the flow module in position and secure it with three screws.
4. Align the inlet as shown. Lower it into the block insulation.

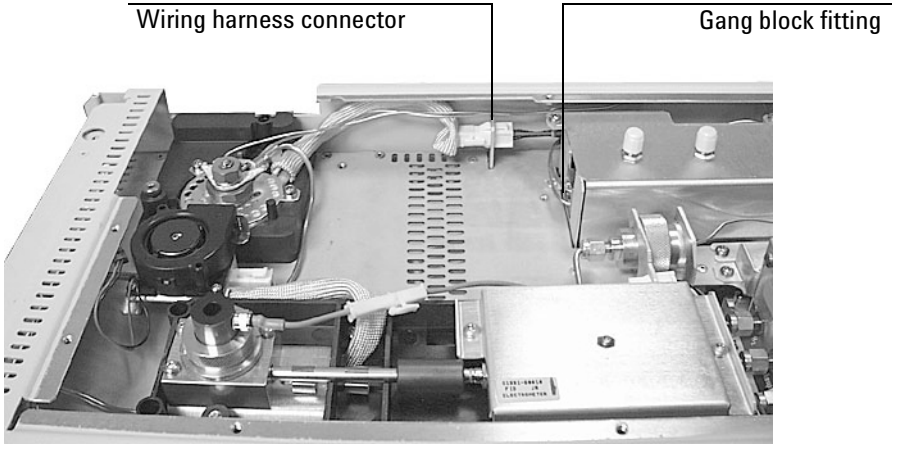


5. Secure the inlet with three screws.
6. Remove the center plugs from the three pieces of cup insulation. Place the bottom, middle, and top insulation rings in the insulation cup.
7. Push the insulation cup up over the bottom end of the inlet and secure to the oven top with two screws.

8. Plug the flow module cable into its connector. Replace the connector cover plate and tighten the screws.



9. Connect the carrier supply line to the back of the flow module.
10. Connect the heater/sensor cable to the wiring harness.



11. **If you *do not* have a gas or liquid sample valve**—Connect the insert weldment to the inlet body and tighten the large nut with the inlet wrench.

    If you *do* have a gas or liquid sample valve—Connect the insert weldment attached to the valve to the inlet body and tighten the large nut with the inlet wrench. Connect the gang block fitting attached to the valve to the front of the flow module.

Restore the GC to operating condition

1. Install the capillary adapter, if used.
2. Restore the column connection.
3. Restore carrier and other gases to the instrument.
4. Restore power.
5. Apply your normal operating pressures. Leak-check the manifold, back panel, and column fittings.

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Acknowledgements
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Safety Symbols
Warnings in the manual or on the instrument must be observed during all phases of operation, service, and repair of this instrument. Failure to comply with these precautions violates safety standards of design and the intended use of the instrument. Agilent Technologies assumes no liability for the customer's failure to comply with these requirements.

In the manual
A warning calls attention to a condition or possible situation that could cause injury to the user.

A caution calls attention to a condition or possible situation that could damage or destroy the product or the user's work.

On the instrument

See accompanying instructions for more information.

Indicates a hot surface.

Indicates hazardous voltages.

Indicates earth (ground) terminal.

Indicates explosion hazard.

Indicates radioactivity hazard.

Indicates electrostatic discharge hazard.

Indicates a pinch hazard.

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